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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.

If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.

If this application was filed on or after June 8, 1995, the term of this patent is twenty years from the U.S. filing date, subject to any statutory extension. If the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121 or 365(c), the term of the patent is twenty years from the date on which the earliest application was filed, subject to any statutory extension.



Bruce Lehman

Commissioner of Patents and Trademarks

Attest
Ellie M. Person



US005785021A

United States Patent [19]
Yudanov et al.

[11] Patent Number: 5,785,021
[45] Date of Patent: Jul. 28, 1998

[54] HYDRAULICALLY ACTUATED
ELECTRONIC FUEL INJECTION SYSTEM

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[73] Assignee: Sergi Yudanov and Invent Engineering Pty Ltd, Australia

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§ 102(e) Date: Nov. 12, 1996

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PCT Pub. Date: Aug. 17, 1995

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F02M 37/04

[51] Int. Cl. 6 123/446; 123/676
[52] U.S. Cl. 123/676, 481,
[58] Field of Search 123/446, 198 D, 447

[56]

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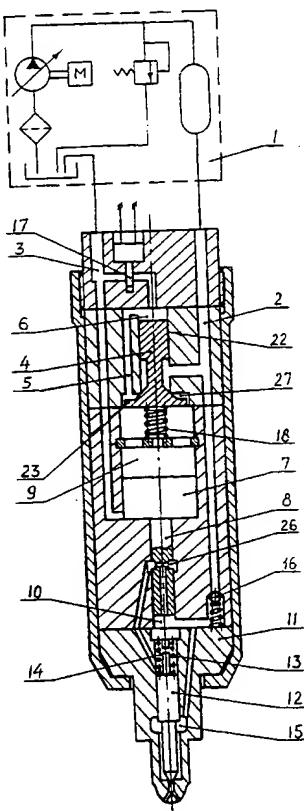
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ABSTRACT

A hydraulically actuated electronically controlled unit injection system comprises a pressure intensifier associated with a hydraulically controlled differential valve (HDV) having a poppet valve opening into a working chamber of the pressure intensifier wherein there is a throttling slot between the poppet valve chamber and the working chamber with either at least a bypass channel between the poppet valve chamber and the working chamber or a bore connecting the working chamber to a control chamber of the HDV.

15 Claims, 8 Drawing Sheets



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